03-29-04

Express Mail No.: EL615431272US

Date Mailed: March 26, 2004

CD7011

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re application of:

Cynthia B. Robinson, et al.

Application No. 10/698,080

Filed: October 29, 2003

For: COMBINATION OF

DEHYDROEPIANDROSTERONE OR DEHYDROEPIANDROSTERONE-SULFATE WITH A LIPOXYGENASE INHIBITOR FOR TREATMENT OF

ASTHMA OR CHRONIC OBSTRUCTIVE

PULMONARY DISEASE

Art Unit: 1624

Examiner: Not Yet Assigned

Confirmation No.: 9176

Atty. Docket: 05882.0070.NPUS01

Information Disclosure Statement

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

Applicants: Cynthia B. Robinson, *et al.*Application No. 10/698,080

not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited by or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120. 1138 OG 37, 38 (May 19, 1992).

Applicants have checked the appropriate boxes below.

- □ 1. This Information Disclosure Statement is being filed;
 - □ a. Within three months of the U.S. filing date of a national application other than a continued prosecution application under §1.53(d);
 - □ b. Within three months of the date of entry of the national stage as set forth in §1.491 in an international application;
 - □ c. Before the mailing date of a first Office Action on the merits;
 - □ d. Before the mailing of a first Office Action after filing of a request for continued examination under § 1.115.

No statement under 37 C.F.R. § 1.97(e) or fee is required.

or;

- □ 2. This Information Disclosure Statement is being filed after the period specified in paragraph 1(a)-1(d) above, but before the mailing date of a Final Rejection or Notice of Allowance, or action that otherwise closes prosecution in the application, and
 - □ a. I hereby state that each item of information contained in this Information

 Disclosure Statement was first cited in any communication from a

 foreign patent office in a counterpart foreign application not more
 than three months prior to the filing of this Information Disclosure

 Statement. 37 C.F.R. § 1.97(e)(1), or
 - □ b. I hereby state that no item of information in this Information Disclosure

 Statement was cited in a communication from a foreign patent

Applicants: Cynthia B. Robinson, *et al.*Application No. 10/698,080

office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2), or

□ c.	Attached is our Check No	in the amount of \$	_ in
	payment of the fee under 37 C	.F.R. § 1.17(p).	

- □ 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but on or before payment of the Issue Fee. Attached is our Check No. _____ in the amount of \$ _____ in payment of the fee under 37 C.F.R. § 1.17(i), and
 - □ a. I hereby state that each item of information contained in this Information

 Disclosure Statement was first cited in any communication from a

 foreign patent office in a counterpart foreign application not more
 than three months prior to the filing of this Information Disclosure

 Statement. 37 C.F.R. § 1.97(e)(1), or
 - □ b. I hereby state that no item of information in this Information Disclosure

 Statement was cited in a communication from a foreign patent
 office in a counterpart foreign application, and, to my knowledge
 after making reasonable inquiry, no item of information contained
 in this Information Disclosure Statement was known to any
 individual designated in 37 C.F.R. § 1.56(c) more than three
 months prior to the filing of this Information Disclosure Statement.

 37 C.F.R. § 1.97(e)(2).
- □ 4. Relevance of the non-English language document(s) is discussed in the present specification.

Applicants: Cynthia B. Robinson, *et al.* Application No. 10/698,080

□ 5.	The document(s) was/were cited in a corresponding foreign application. An
	English language version of the foreign search report is attached for the
	Examiner's information.
□ 6.	A concise explanation of the relevance of the non-English language document(s)
	appears below:
1 7.	The Examiner's attention is directed to co-pending U.S. Patent Application No.
	, filed, which is directed to related technical subject
	matter. The identification of this U.S. Patent Application is not to be
	construed as a waiver of secrecy as to that application now or upon
	issuance of the present application as a patent. The Examiner is
	respectfully requested to consider the cited application and the art cited
	therein during examination.
□ 8.	Copies of the documents were cited by or submitted to the Office in Application
	No, filed, which is relied upon for an earlier
	filing date under 35 U.S.C. § 120. Thus, copies of these documents are
	not attached. 37 C.F.R. § 1.98(d).
	It is respectfully requested that the Examiner initial and return a copy of the
enclose	ed PTO-1449, and to indicate in the official file wrapper of this patent application
that the	documents have been considered.
	The U.S. Patent and Trademark Office is hereby authorized to charge any fee
deficie	ncy, or credit any overpayment, to our Deposit Account No. 08-3038 referencing
docket	number 05882.0070.NPUS01.
	Respectfully submitted,
	CO + 1 CM
Date: 1	March 26, 2004 Albert P. Halluin (Reg. No. 25,227)
	Robin C. Chiang (Reg. No. 46,619)
	REY SIMON ARNOLD & WHITE, LLP
Box No	venswood Avenue o. 34
Menlo	Park, CA 94025
(650)4	63-8109

Doc. #8012535-v1



LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO FORM 1449

ATTY. DOCKET NO.	APPLICATION NO.				
02486.0070.NPUS01	10/698,080				
APPLICANT					
Cynthia B. Robinson, et al.					
FILING DATE	GROUP				
October 29, 2003	1624				

			U.S. PATE	NT DOCUMENTS			
*EXAMINER		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE
	1.	4,393,066	Jul. 1983	Garrett et al.			
	2.	4,499,064	Feb. 1985	Shive			
	3.	4,575,498	Mar. 1986	Holmes et al.			
	4.	4,628,052	Dec. 1986	Peat			
	5.	4,873,259	Oct. 1989	Summers Jr. et al.			
	6.	4,920,115	Apr. 1990	Nestler et al.			
	7.	4,931,441	Jun. 1990	Lawrence			
	8.	4,985,443	Jan. 1991	Montes		i	
	9.	5,021,417	Jun. 1991	Prost			
	10.	5,059,595	Oct. 1991	Le Grazie			
	11.	5,077,284	Dec. 1991	Loria et al.			
	12.	5,110,810	May 1992	Eich et al.			
	13.	5,118,505	Jun. 1992	Költringer			
	14.	5,162,198	Nov. 1992	Eich et al.			
	15.	5,173,488	Dec. 1992	Haeger			
	16.	5,177,076	Jan. 1993	Nijkerk et al.			
	17.	5,266,312	Nov. 1993	Leung et al.			
	18.	5,270,305	Dec. 1993	Palmer			
	19.	5,347,005	Sep. 1994	Mueller et al			
	20.	5,407,684	Apr. 1995	Loria et al.			
	21.	5,407,927	Apr. 1995	Morales et al.			
	22.	5,489,581	Feb. 1996	Daynes et al.			
	23.	5,527,789	Jun. 1996	Nyce			

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO FORM 1449

ATTY. DOCKET NO. 02486.0070.NPUS01	APPLICATION NO. 10/698,080				
APPLICANT					
Cynthia B. Robinson, et al.					
FILING DATE GROUP					
October 29, 2003	1624				

						,		
	24.	5,532,230	Jul. 1996	Daynes et al.				
:	25.	5,538,734	Jul. 1996	Le Grazie				
	26.	5,583,126	Dec. 1996	Daynes et al.				
	27.	5,629,337	Mar. 1997	Gray				
	28.	5,635,496	Jun. 1997	Daynes et al.				
: !	29.	5,660,835	Aug. 1997	Nyce				
	30.	5,686,438	Nov. 1997	Daynes et al.				
	31.	5,703,063	Dec. 1997	Chasalow, et al.				
	32.	5,767,278	Jun. 1998	Gaeta et al.				
	33.	5,811,418	Sep. 1998	Daynes et al.				
	34.	5,859,000	Jan. 1999	Dowell et al.				
	35.	5,861,391	Jan. 1999	Yen et al.				
	36.	5,948,434	Sep. 1999	Labrie				
	37.	6,087,351	Jul. 2000	Nyce				
	38.	6,093,706	Jul. 2000	Zeligs				
	39.	2002/0042401	Apr. 2002	Ferguson et al.				
	40.	2003/0013772	Jan. 2003	Murphy et al.				
	41.	2003/0138434	Jul. 2003	Campbell et al.				
	42.	2003/0139331	Jul. 2003	Martin et al.				
		ı	OREIGN PA	TENT DOCUMENTS				
*EXAMINER		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLA	TION
INITIAL							YES	NO
*	43.	EP 0 279263 B1		Europe				
×	44.	WO 93/16704		PCT				
*	45.	WO 96/16680		PCT				
*	46.	WO 97/48367		PCT				

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

NO Received

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO FORM 1449

ATTY. DOCKET NO. 02486.0070.NPUS01	APPLICATION NO. 10/698,080
APPLICANT	
Cynthia B. Robinson, et a	l
FILING DATE	GROUP
October 29, 2003	1624

		γ						
X	47.	WO 98/03180		PCT				
*	48.	WO 00/54763		PCT				
*	49.	WO 01/015745		РСТ				
.*	50.	WO 02/069955		PCT				
X	51.	WO 02/85296		PCT				
X	52.	WO 03/072572		PCT				
*	53.	WO 04/014993 A2		PCT				
		(Including		REFERENCES Date, Pertinent Pages,	Etc.)			
X	54.	Araneo <i>et al.</i> , "Dehydroo Thermal Injury", <i>J. Sur</i> g			e Dermal Iso	chemia Cau	sed by	
*	55.	Bonnett <i>et al.</i> , "Dehydro hypertension," <i>PNAS</i> 1	-		nd reverses o	chronic hype	oxic pulmo	nary
#	56.	Budavari, The Merck Inc	dex 11 th ed., 1	989, pp. 660-661, mone	ograph 4141	<u>.</u>		
*	57.	Coleridge et al., "Intravenous aminophylline confers no benefit in acute asthma treated with intravenous steroids and inhaled bronchodilators", Aust. N.Z. J. Med. 23:348-54 (1993).						
*	58.	Dashtaki <i>et al.</i> , " Dehydroepiandrosterone and Analogs Inhibit DNA Binding of AP-1 and Airway Smooth Muscle Proliferation ¹ ," <i>J. Pharmacol. Exp. Thera.</i> 285(2):876-83 (1998).						
×	59.	Dompeling <i>et al.</i> , "Treatment with Inhaled Steroids in Asthma and Chronic Bronchitis: Long Term Compliance and Inhaler Technique", <i>Family Practice</i> 9(2):161-6 (1992).						
*	60.	Dunn, et al., "Dehydroepiandrosterone sulphate concentrations in asthmatic patients: pilot study," N.Z. J. Med. 97(768):805-8 (1984).						
*	61.	Duplantier, et al., Novel pharmacological approaches to the treatment of asthma: status and potential of therapeutic classes", DDT 1(5):199-207 (1996)						
#	62.	Dworski et al., "Conspectus: Inhaled Steroids in Asthma", Comprehensive Therapy, 18:3 (1992).						
*	63.	Fehér et al., "Adrenocortical Function in Bronchial Asthma", Acta Medica Hungarica 40(2-3):125-32 (1983).						
*	64.	Fehér, et al., " Dehydroe Bronchial Asthma," Natl European Academy of A (1986).	. Institute of F	Rheumatism and Physio	therapy, in X	III Congres	s of the	jary

1624

LIST OF REFERENCES CITED BY APPLICANT

(Use several sheets if necessary)

PTO FORM 1449

ATTY. DOCKET NO.

02486.0070.NPUS01

APPLICANT

Cynthia B. Robinson, et al.

FILING DATE

APPLICATION NO.

10/698,080

APPLICATION NO.

10/698,080

October 29, 2003

 65.	Hampl <i>et al.</i> , "Dehydroepiandrosterone sulphate reduces chronic hypoxic pulmonary hypertension in rats," <i>J. Eur. Respir.</i> 21:862-5 (2003).
66.	Holzmann <i>et al.</i> , "Therapy of Psoriasis with Dehydroepiandrosterone-Enanthate. II. Intramuscular Depot Application of 300 mg", <i>Arch. Dermatol. Forsch.</i> 247(1):23-8 (1973) (German with English Abstract).
67.	Hummel et al., "Comparison of oral-steroid sparing by high-dose and low-dose inhaled steroid in maintenance treatment of severe asthma", <i>The Lancet</i> , 340(8834/8835):1483-7 (1992).
68.	Itagaki <i>et al.</i> , "Effect of Cortisol on the Release of Human Decidual", <i>Caplus</i> , 114875 (1991) (Japanese with English Abstract).
69.	Koó et al., "Our experiences with Dehydroepiandrosterone Therapy in Steroid-Dependent Intrinsic Bronchical Asthma", Orvosi Hetilap 128(38):1995-7 (1987) (Hungarian).
70.	Koó et al., " Our experiences with Dehydroepiandrosterone Therapy in Steroid-Dependent Intrinsic Bronchical Asthma ", <i>Orvosi Hetilap</i> 128(38):1995-7 (1987) (English translation).
71.	Lejeune, "Pathogenesis of Mental Impairment in Trisomy 21", <i>Annales de Génétique</i> , 92:27643 (1996) (French with English Abstract).
72.	Mileva et al., "Androstenedione, DHEA sulfate, cortisol, aldosterone and testosterone in bronchial asthma patients", 07608054 (1990) (Russian with English Abstract).
73.	Nakagawa, et al., "The Properties of Water of Crystallization of Sodium Prasterone Sulfate," Chem. Pharm. Bull 29(5):1466-9 (1981)
74.	Nakagawa, et al., "The Grinding and Drying on the Solid State Stability of Sodium Prasterone Sulfate," Chem. Pharm. Bull 30(1):242-8 (1982)
75.	Pashko <i>et al.</i> , "Inhibition of 7,12-dimethylbenz(a)anthracene-induced Skin Papillomas and Carcinomas by Dehydroepiandrosterone and 3-beta-methylandrost-5-en-17-one in mice", <i>Cancer Res.</i> 45(1):164-6 (1985).
76.	Peeters et al., "Differences in Purine Metabolism in Patients with Down's Syndrome", J. Intellect. Diabil. Res. 37:471 (1993). Abstract.
77.	Reed, "Aerosol Steroids as Primary Treatment of Mild Asthma", New England J. Med., 325(6):425-6 (1991).
78.	Rowe et al., "Effectiveness of Steroid Therapy in Acute Exacerbations of Asthma: A Meta-analysis", Amer. J. Emergency Med., 10(4):301-10 (1992).
79.	Sasaki et al., "Cervical Ripening with Dehydroepiandrosterone Sulphate", Br. J. Obstet. Gynaecol. 89(3):195-8, (1982).

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) PTO FORM 1449 APPLICANT

APPLICATION NO.

02486.0070.NPUS01

APPLICANT

Cynthia B. Robinson, et al.

FILING DATE

October 29, 2003

APPLICATION NO.

APPLICATION NO.

GROUP

1624

80	Sciarra <i>et al.</i> , "Aerosols", Remington's Pharmaceutical Sciences, 18 th ed. (1990), Eds. Gennaro <i>et al.</i> , pp. 1873-5 and 1694-1712.
8	Sharma <i>et al.</i> , "Screening of potential chemopreventive agents using biochemical markers of carcinogenesis", <i>Cancer Res.</i> 54(22):5848-55 (1994).
8.	2. Shomali, "The Use of Anti-Aging Hormones. Melatonin. Growth Hormone, Testosterone, and Dehydroepiandrosterone: Consumer Enthusiasm for Unproven Therapies", <i>Md. Med. J.</i> 46(4):181-6 (1997).
. 8	3. Sonka <i>et al.</i> , "Gout and Dehydroepiandrosterone: 3. DHEA Administration", <i>Endokrynologia Polska</i> 24(3):209-18 (1973).
8-	Sur et al., "Double-blind trial pyroxidine (vitamin B6) in the treatment of steroid-dependent asthma", Ann. Allergy, 70:147-52 (1993).
8	Schwartz <i>et al.</i> , "Inhibition of 7,12-dimethylbenz[a]anthracene- and urethan-induced lung tumor formation in A/J mice by long-term treatment with dehydroepiandrosterone," <i>Carcinogenesis</i> 2(12):1335-7 (1981)
8	Van de Graaf <i>et al.</i> , "Respiratory Membrane Permeability and Bronchial Hyperreactivity in Patients with Stable Asthma: Effects of Therapy with Inhaled Steroids", <i>Bronchial Asthma and Respiratory Membrane Permeability</i> 143:362-8 (1991).
8	7. Van Vollenhoven <i>et al.</i> , "Dehydroepiandrosterone in SLE. Results of a Double-Blind, Placebo-Controlled, Randomized Clinical Trial.", <i>Arthritis Rheum.</i> 38(12): 1826-31 (1995).
8	3. Wolkowitz <i>et al.</i> , "Dehydroepiandrosterone Treatment of Depression", <i>Biol. Psychiatry</i> 41(3):311-8. (1997).